



Stormwater Coalition of Monroe County

**Pollution Prevention -
Public Works Operations &
Fleet Maintenance Facilities**

EPA Stormwater Program

- Required by 1987 Clean Water Act Amendments
- Phase I addressed:
 - medium and large municipalities
 - certain industrial activities and construction activities >5 acres
- Now working on Phase II: small municipalities



Municipal Cooperation

- Municipalities in Monroe County created the Stormwater Coalition
- Coalition facilitates cooperation among the towns and villages in their efforts to comply with the NYS Phase II Stormwater Regs
- Projects include - model ordinances, employee training, public education

Six Minimum Control Measures

- **Pollution prevention and good housekeeping at municipal operations**
- Public education and outreach
- Public involvement and participation
- Illicit discharge detection and elimination
- Construction site runoff control
- Post-construction stormwater management

Pollution Prevention and Good Housekeeping

- Municipalities, including schools, must develop & implement a program to reduce pollutant runoff from municipal operations
- Must include employee training for:
 - **public works & fleet maintenance operations**
 - other municipal operations such as stormwater system maintenance

Benefits of Pollution Prevention

- **Cheaper to prevent pollution than to clean it up**
- Eliminates or reduces the amount of pollutants released to the environment
- Promotes environmental compliance
- Priorities:
 - source reduction - don't generate waste in the first place.
 - reuse and recycling

Public Works Operations Facilities: Pollution Prevention BMPs



Work Under a Roof When Possible

- Vehicle maintenance
- Vehicle washing
- Draining of fluids
- Storage of fluids or waste fluids
- Truck parking, to the extent possible

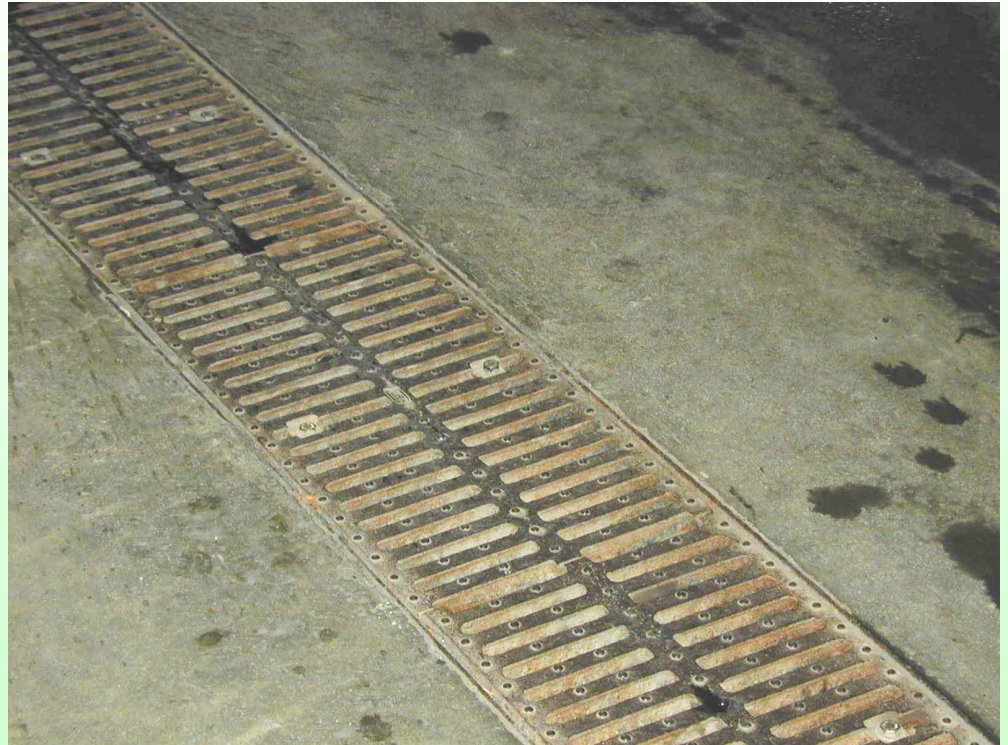
Vehicle Wash Bays

- Wash vehicles to remove contamination and prevent it from polluting stormwater
- Wash indoors if possible
- Treat wash water with oil-water separator



Trench Drain

- Divert process water to trench drain to collect contaminated runoff inside work areas
- Trench drain should treat water with oil-water separator
- Clean out solids periodically



Indoor Vehicle Parking

- Park vehicles indoors if possible to prevent stormwater contamination
- Rinse contaminants through trench drain system



Working Outdoors

- When working outdoors, collect contaminated water and sediment to prevent it from mingling with stormwater



Fluids Management

- Identify potential leaks and make repairs.
- Drain fluids over a drip pan or pad.
- Use funnels or pumps when transferring fluids.
- Place a drip pan under any leak.
- Never let fluids drip or leak into the ground, surface water, dry well, septic system or stormwater system.

Fluids Management

- Ensure that process wastewater flows through an oil/water separator.
- Keep fluids management service contracts up-to-date.
- Ensure that drains are connected to a sanitary sewer.

Containers

- Keep in good condition, closed, covered and away from equipment that can cause them to tip.
- Label properly.
- Inspect at regular intervals (i.e. weekly).
- Place absorbent pads on top of drums when in use.
- Store under a roof if possible.

Secondary Containment

- Store fluids with the appropriate amount of secondary containment
- Use drum-top pads for leaks and spills from drums



Parts Washing

- Use closed-loop parts washer system to contain solvent
- Keep parts washer lid down when not in use
- Contract with parts washer company to change out spent solvent
- Try aqueous-based parts washer



Storage

- Store fluids indoors in appropriate containers and/or storage cabinets
- Label storage areas clearly
- Keep area clean and well organized



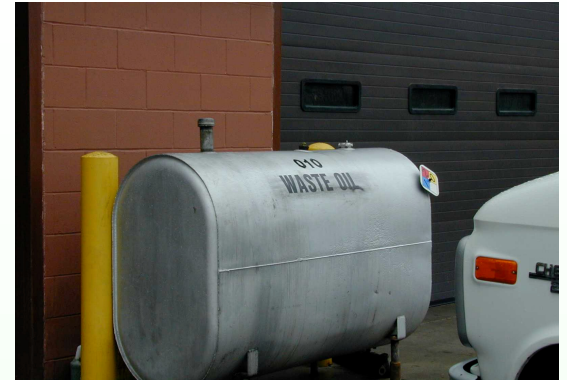
Leak and Spill Prevention and Control

- Inspect vehicles daily.
- Keep spill control equipment & absorbents handy.
- Plan for emergencies; post phone numbers.
- Make MSDS fact sheets readily available.
- Clean up spills right away. Call DEC if required.
- Train employees annually.

BMPs for Oil

- Drain oil over a drip pan or pad.
- Change oil indoors over concrete sloped-to-drain or curbed surface.
- Use funnels or pumps when transferring fluids.
- Place a drip pan under any leak.

Waste Oil



- Store indoors with secondary containment.
- Keep containers in good condition, closed, labeled and inspected regularly.
- Do not mix anything else with used oil.
- Various types of oil can be mixed.
- Do not dispose through the use of absorbent materials except for spill cleanup.
- Recycle used oil.

BMPs for Antifreeze

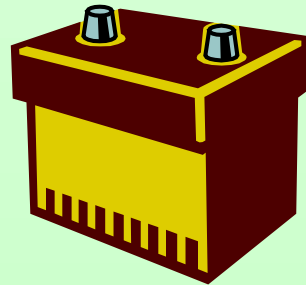
- Change indoors over concrete sloped-to-drain or curbed surface.
- Drain antifreeze over a drip pan or pad.
- Use funnels or pumps when transferring.
- Place a drip pan under any leak.

Waste Antifreeze

- Store indoors with secondary containment.
- Keep containers in good condition, closed, labeled and inspected regularly.
- Do not mix antifreeze with any other wastes.
- Recycle used antifreeze.

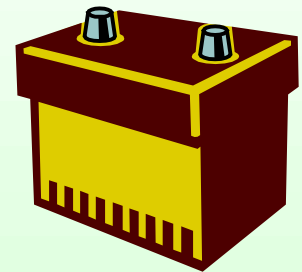
BMPs for Lead-Acid Batteries

- Store indoors over a curbed impermeable surface.
- Place intact batteries on an acid-resistant rack or tub.
- Place cracked or leaking batteries in a closed leak-proof and labeled container.



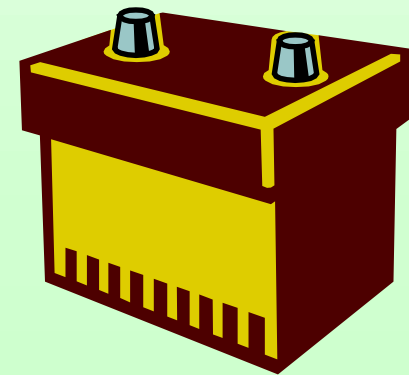
BMPs for Lead-Acid Batteries

- Note the date each battery was put into storage.
- Do not stack more than 5 high.
- Inspect often for leaks.
- Keep neutralizing agent (s.a. baking soda) handy in case of leaks.



Battery Recycling

- Do not dispose in trash.
- Avoid storing batteries for longer than 6 months before recycling.
- Leave on lead cable ends and recycle them along with the batteries.



BMPs for Tires

- Store indoors
- If you must store outdoors, cover tire pile
- Recycle frequently



BMPs for Fueling Areas

- Fuel under a canopy
- Have spill clean-up materials handy
- Disconnect the handle lock so the person fueling must attend the fueling process
- Use breakaway valves on fueling hoses
- Keep fueling area run off separate from uncontaminated stormwater
- Monitor all fuel deliveries
- Make sure the automatic stop is operating properly

Rags, Oil-Absorbing Pads, Towels and Clothing

- Store oily rags & absorbent pads in appropriate containers. Dispose of them properly.
- For reusable soiled materials, use:
 - a commercial service, or
 - an in-house washing machine that discharges to a sanitary sewer system via an oil/water separator. (Emulsifying detergents should not be used in washing machines that discharge to an oil/water separator)

Salt Storage

- Store salt piles in building or under roof
- Clean up salt spills at the facility promptly
- Design new salt storage facilities to keep stormwater draining away from the salt pile



Storage Piles

- Store piles of spoils, asphalt, street cuts, etc. under roof or cover
- Clean up spills of debris on facility grounds promptly

Roof Runoff

- Prevent uncontaminated stormwater from mixing with process areas
- “Keep clean water clean”

